

Federal law requires every operating mine in the United States to have access to two mine rescue teams. Mine rescuers are highly-trained specialists with life-saving skills they hope they'll never need to use. The Westinghouse Waste Isolation Division, management and operating contractor for the U.S. Department of Energy (DOE) at the Waste Isolation Pilot Plant (WIPP), maintains two well trained, physically fit, and fully equipped mine rescue teams.

In addition to rescue capabilities, WIPP's Blue and Silver mine rescue teams support (and are supported by) personnel from area potash mines through Memorandums of Understanding. This ensures that mines in the same region have access to capable, highly-trained personnel in the event of an emergency.

In the Beginning . . . The Early Days of Mine Rescue

During the early 1900s, while investigating mine disasters and their causes, it was important and necessary to examine conditions in a mine as soon as possible after an explosion or fire. This need led to establishing mine-safety stations and rail cars.

Although the original purpose of these stations and cars was to aid in technical studies and investigations, the courageous rescue work performed was so humanitarian and spectacular that the stations and cars soon were referred to as "mine-rescue" stations and cars.



Stations and cars were equipped with mine-rescue and first-aid equipment, much of which in the beginning came from England and Germany. The railroad cars were former Pullman sleeping cars purchased by the United States government. Interiors were remodeled to include offices, training and workrooms, and cooking, eating, and sleeping quarters.

The primary goal was to investigate, as quickly as possible, causes of a mine disasters, assist in the rescue of miners, and render first aid. Miners routinely trained in safety, use of rescue/ first-aid equipment and methods, examined safety conditions and recommended improvements.

When a mine disaster occurred, the employee in charge, with available help and equipment, proceeded by train or other transportation to the mine. When a rescue car was used, it was moved by a special locomotive or connected to the first train available.

Practice Makes Perfect: Mine Rescue Competitions

Mine rescue training began in the United States in 1910, the year the U.S. Bureau of Mines was created. Joseph A. Holmes, the bureau's first director, sought a training vehicle that would provide the mining industry with a cadre of mine rescue specialists prepared to respond to mine disasters. His training efforts evolved into local and regional competitions and, a year later, a national contest.

Mine safety demonstrations, or mine rescue competitions as they are called today, are designed to sharpen skills and test the knowledge of team members who would be called on to respond to a mine emergency. The contests require team members to solve hypothetical mine emergency problems (such as fires, explosions or cave-ins) while being timed and observed by judges from the Mine Safety and Health Administration.

Teams are tested on knowledge of mine gases, ventilation, first-aid, mine recovery, and fire-fighting. Points are deducted according to the types and seriousness of infractions. In other words, teams are penalized more for life-threatening mistakes than for minor procedural mistakes.

In real emergencies, the lives of mine rescue team members and their co-workers depend on the proficiency of each individual's skill and training.

WIPP Mine Rescue Teams Among the Nation's Best

Since 1986, WIPP mine rescue teams have been among the nation's best in competition. Over the past 13 years, the Blue and Silver teams have collected 134 team trophies, including first-place in 65 competitions.

WIPP teams also have won four national mine rescue championships (1990, 1992, 1994, 1996) for non-producing mines. In 1998, WIPP's bench person was named a national champion.

Volunteers Train to Save Others

At WIPP and most other mines, mine rescue team members consist of volunteers who report to work every day, performing normal tasks eight hours a day. The teams are composed of hoisting supervisors, mechanics, waste handlers, mining operators, and other occupations. One day a month, the teams practice and prepare for the day they are called to a real emergency. These volunteers devote countless hours, both before and after work, honing their skills. Each mine rescue team consists of five working members and three support specialists:

- **Z** Captain, who leads the team and makes the final decision with input from other members.
- **Ž Gas person**, proficient in the knowledge of mine gases that could be hazardous to team members.
- **Ž** Map person, who documents conditions found when the team enters the mine.
- **Ž** First-aid person, who, in the event of a medical emergency, assumes control and directs the team in caring for patients.
- **Ž** Co-captain, who maintains communication with the Fresh Air Base and ensures the general wellbeing of the team.
- **Ž** Fresh Air Base specialist, who, at the base of operations (the Fresh Air Base), maintains communication with the team and the command center. This person also monitors and controls activities at the Fresh Air Base.
- **Ž** Bench person, responsible for maintaining and repairing the self-contained breathing equipment.
- **Ž** Alternate, who is prepared to step in and replace any team member who is unable to perform.



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